

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P842421

Luminaire Tested: **ARCH4-40-750-U-T4W**

Issue Date: 5/27/2024

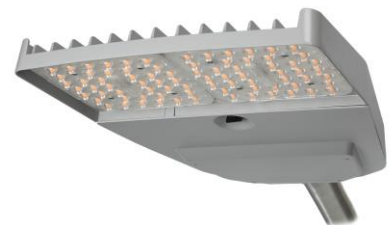
Test Information

Test Method: LM-79-08
Report Number: P842421
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-40-750-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 355mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7833 lumens
Efficiency: N/A
Efficacy: 178.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 43.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



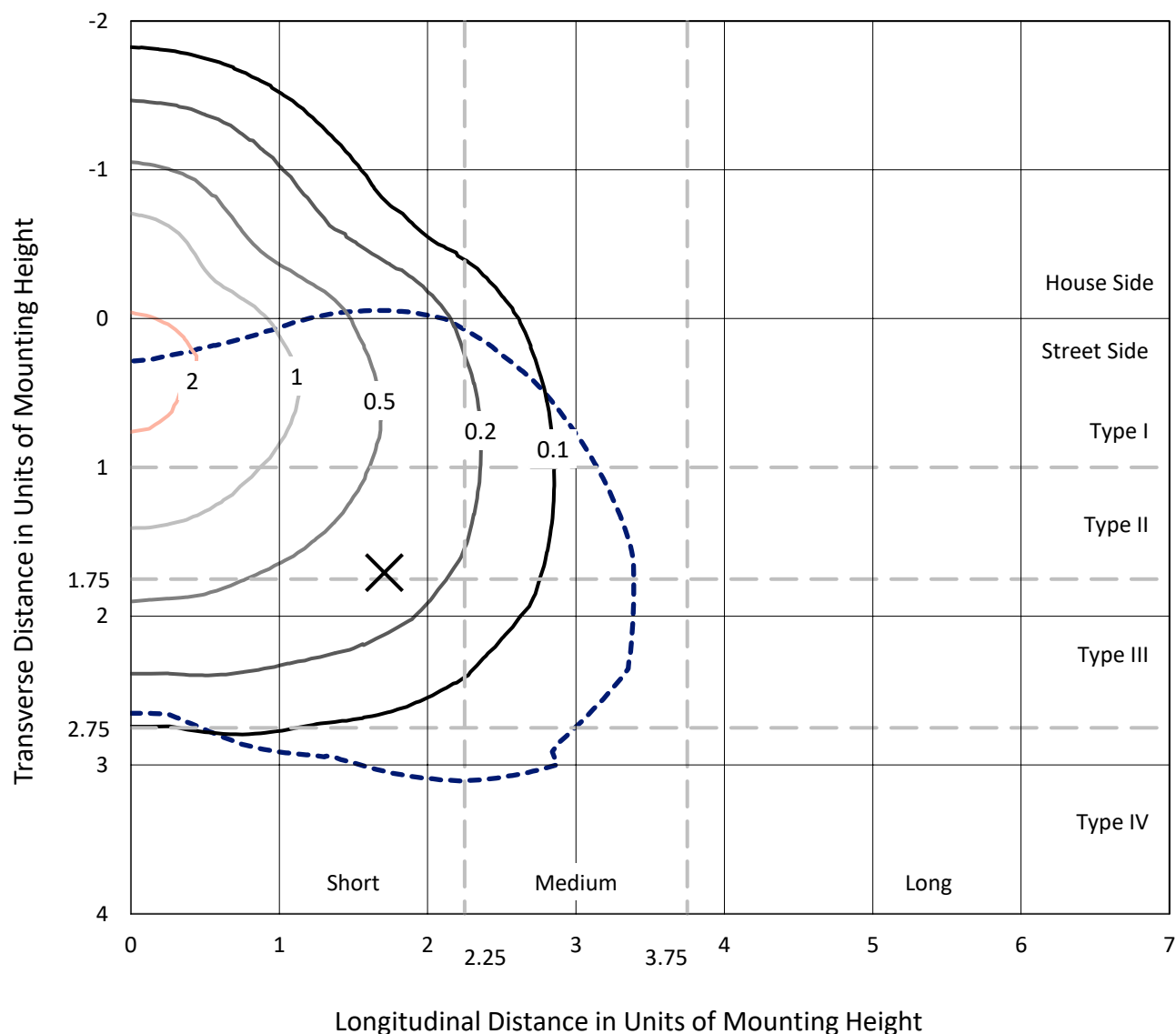
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

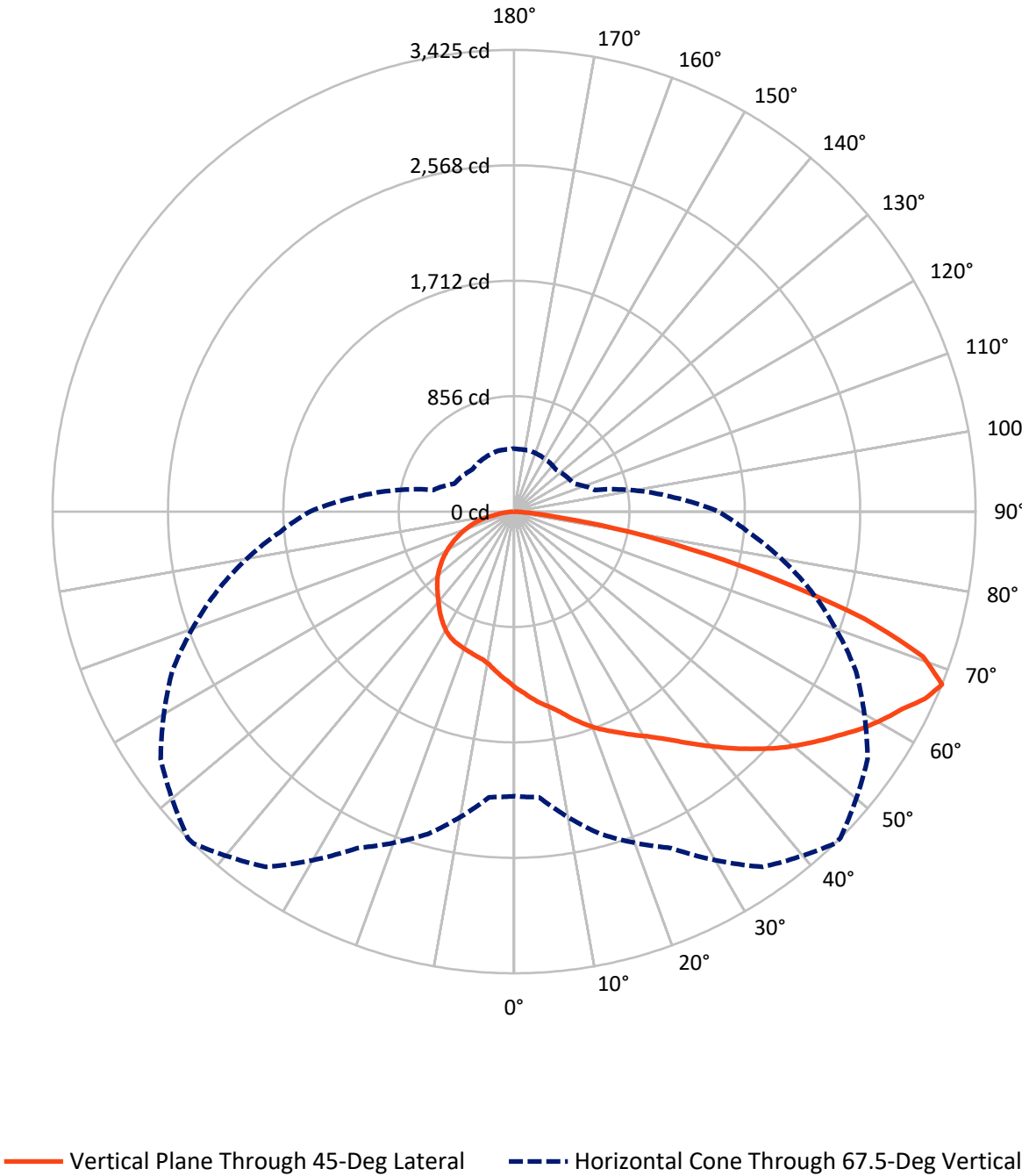


Based on 25 foot mounting height. Maximum calculated value = 2.4 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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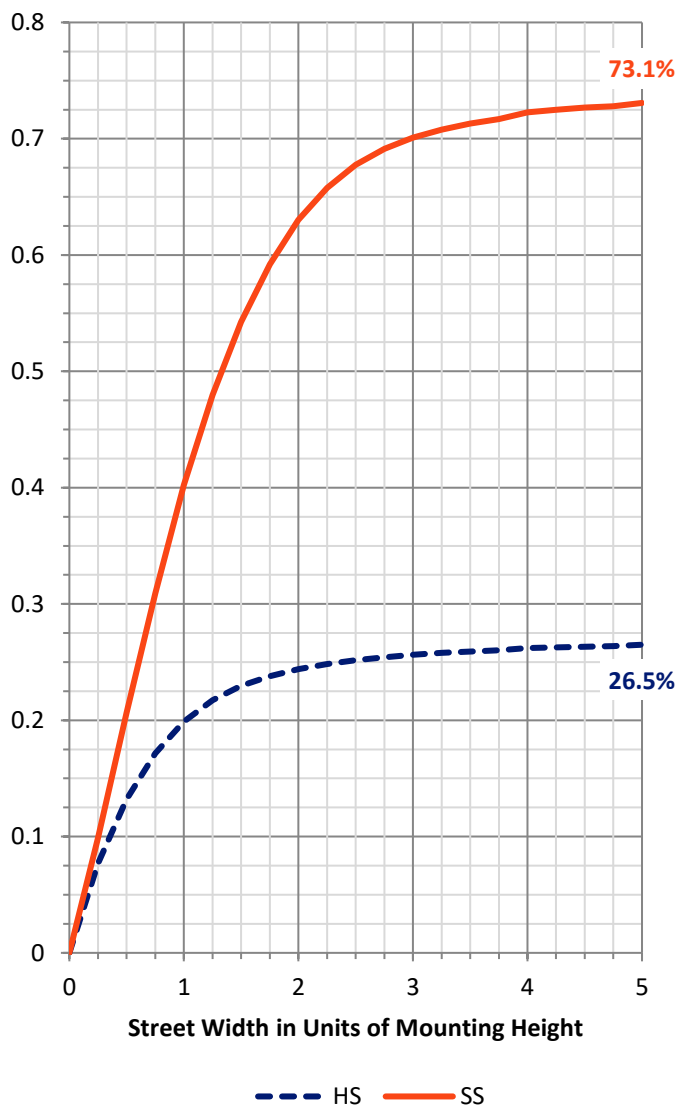
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2092.6	0.0	2092.6
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	5740.4	0.0	5740.4
	% Fixture	73.3	0.0	73.3
Total	Lumens	7833.0	0.0	7833.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.1	1.6
10°-20°	386.4	4.9
20°-30°	667.0	8.5
30°-40°	983.5	12.6
40°-50°	1332.5	17.0
50°-60°	1628.6	20.8
60°-70°	1679.7	21.4
70°-80°	920.0	11.7
80°-90°	110.3	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	7833.0	100.0
0°-180°	7833.0	100.0

Coefficient of Utilization



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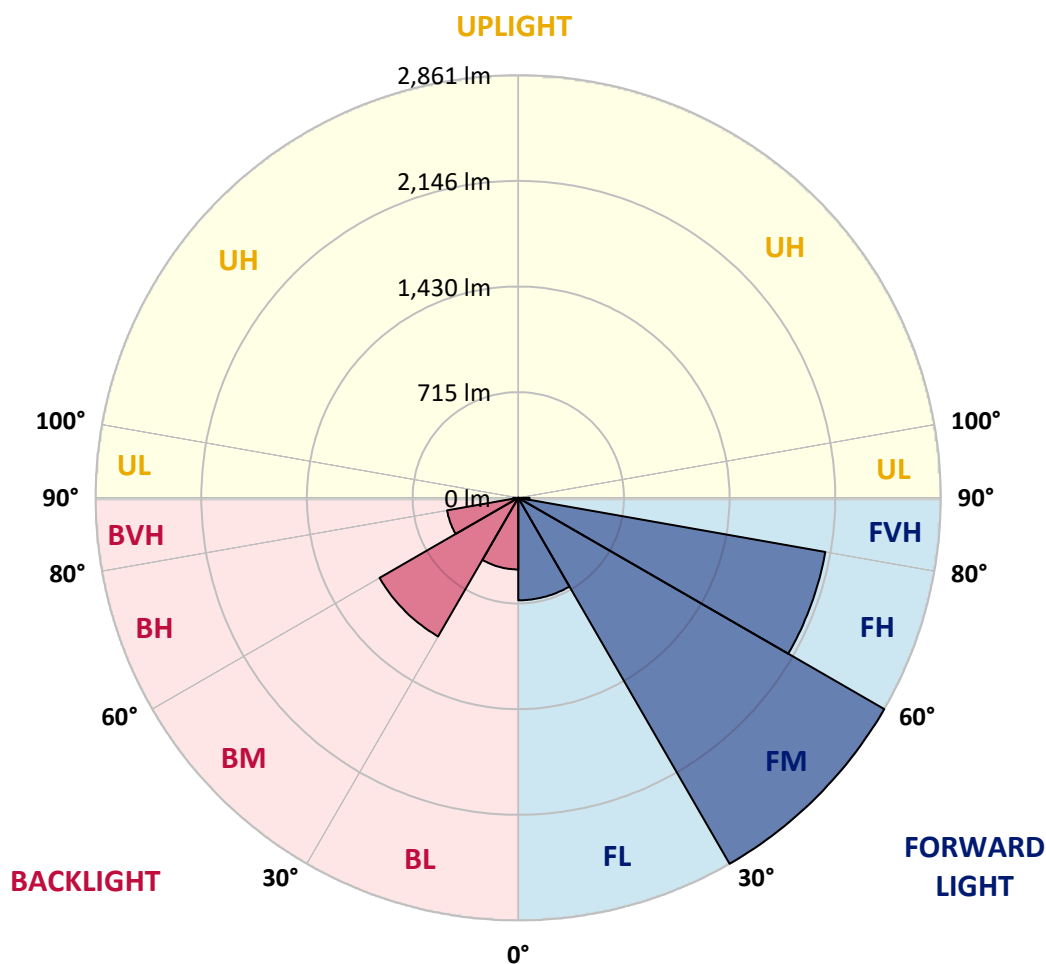
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	693.4	8.9			
FM	(30°-60°)	2860.7	36.5			
FH	(60°-80°)	2110.3	26.9			G2/5000
FVH	(80°-90°)	76.0	1.0			G1/100
BL	(0°-30°)	485.0	6.2	B1/500		
BM	(30°-60°)	1083.9	13.8	B2/2500		
BH	(60°-80°)	489.4	6.2	B1/500		G1/500
BVH	(80°-90°)	34.3	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4
2.5°	1363.6	1362.4	1364.8	1356.5	1345.7	1344.5	1344.5	1337.4	1329.0	1312.4	1299.2
5°	1428.0	1425.6	1426.8	1414.9	1400.6	1393.4	1392.2	1376.7	1357.7	1331.4	1307.6
7.5°	1487.6	1485.2	1484.0	1470.9	1449.4	1437.5	1436.3	1413.7	1391.0	1350.5	1315.9
10°	1543.6	1541.2	1538.8	1520.9	1494.7	1476.8	1474.5	1445.9	1417.2	1367.2	1323.1
12.5°	1615.1	1610.3	1608.0	1586.5	1548.4	1529.3	1525.7	1487.6	1451.8	1391.0	1337.4
15°	1690.2	1686.6	1683.1	1662.8	1619.9	1594.9	1588.9	1541.2	1492.3	1422.0	1358.8
17.5°	1746.2	1742.7	1742.7	1724.8	1685.4	1656.8	1652.1	1594.9	1534.1	1450.6	1375.5
20°	1780.8	1777.2	1780.8	1770.1	1740.3	1716.4	1711.7	1648.5	1575.8	1476.8	1389.8
22.5°	1805.8	1802.3	1808.2	1803.4	1782.0	1767.7	1764.1	1702.1	1618.7	1504.3	1404.1
25°	1849.9	1849.9	1849.9	1841.6	1821.3	1816.6	1816.6	1762.9	1673.5	1540.0	1425.6
27.5°	1938.1	1933.4	1927.4	1903.6	1869.0	1867.8	1875.0	1824.9	1736.7	1586.5	1451.8
30°	2068.1	2065.7	2043.0	1993.0	1934.6	1928.6	1933.4	1891.7	1804.6	1635.4	1481.6
32.5°	2236.1	2227.8	2181.3	2106.2	2022.8	1995.4	2004.9	1960.8	1876.2	1685.4	1510.2
35°	2355.3	2357.7	2324.3	2256.4	2157.5	2084.8	2091.9	2038.3	1953.6	1741.5	1546.0
37.5°	2492.4	2500.7	2450.7	2399.4	2307.6	2183.7	2190.8	2118.1	2031.1	1811.8	1584.1
40°	2681.9	2665.2	2580.6	2519.8	2418.5	2287.4	2293.3	2207.5	2120.5	1878.5	1628.2
42.5°	2840.5	2810.7	2708.1	2630.7	2509.1	2397.0	2403.0	2304.1	2211.1	1952.4	1677.1
45°	3068.1	2985.9	2838.1	2799.9	2602.1	2504.3	2510.3	2406.6	2306.5	2031.1	1729.5
47.5°	3200.4	3069.3	2975.1	2954.9	2704.6	2615.2	2622.3	2515.1	2409.0	2120.5	1784.4
50°	3192.1	3107.5	3080.0	3030.0	2795.2	2718.9	2726.0	2627.1	2512.7	2208.7	1836.8
52.5°	3137.3	3152.8	3138.4	3055.0	2885.8	2819.0	2827.3	2737.9	2618.8	2291.0	1885.7
55°	3221.9	3232.6	3205.2	3095.5	2985.9	2919.1	2928.7	2854.8	2723.6	2363.7	1927.4
57.5°	3323.2	3285.1	3257.6	3167.1	3089.6	3027.6	3038.3	2974.0	2814.2	2422.1	1959.6
60°	3318.4	3238.6	3266.0	3171.8	3159.9	3127.7	3137.3	3071.7	2883.4	2465.0	1972.7
62.5°	3074.1	3031.2	3169.4	3137.3	3217.1	3217.1	3229.0	3131.3	2925.1	2482.9	1965.6
65°	2649.7	2652.1	2895.3	3028.8	3285.1	3339.9	3349.4	3168.2	2901.2	2430.4	1898.8
67.5°	2111.0	2126.5	2475.7	2753.4	3217.1	3423.3	3424.5	3201.6	2798.7	2282.6	1743.8
70°	1544.8	1556.7	1969.1	2306.5	2896.5	3238.6	3219.5	3107.5	2575.8	2025.2	1501.9
72.5°	1044.2	1054.9	1479.2	1771.3	2376.8	2758.2	2716.5	2746.3	2195.6	1664.0	1207.5
75°	702.1	715.2	1052.5	1267.1	1748.6	2094.3	2001.3	2080.0	1698.6	1259.9	880.9
77.5°	442.2	450.6	668.7	830.8	1194.4	1425.6	1332.6	1333.8	978.6	678.2	473.2
80°	281.3	283.7	405.3	479.2	691.3	857.0	758.1	616.2	441.0	360.0	282.5
82.5°	163.3	159.7	242.0	270.6	329.0	325.4	269.4	255.1	193.1	180.0	144.2
85°	65.6	60.8	106.1	98.9	100.1	106.1	78.7	78.7	63.2	48.9	35.8
87.5°	13.1	13.1	14.3	13.1	13.1	14.3	10.7	10.7	9.5	9.5	9.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4	1306.4
2.5°	1296.9	1294.5	1288.5	1273.0	1264.7	1259.9	1252.8	1250.4	1249.2	1250.4	1253.9
5°	1300.4	1292.1	1275.4	1250.4	1233.7	1223.0	1211.0	1206.3	1202.7	1202.7	1206.3
7.5°	1302.8	1289.7	1261.1	1224.2	1200.3	1183.6	1169.3	1163.4	1162.2	1165.7	1166.9
10°	1304.0	1284.9	1244.4	1197.9	1166.9	1145.5	1131.2	1127.6	1131.2	1138.3	1139.5
12.5°	1312.4	1286.1	1234.9	1180.0	1143.1	1121.6	1110.9	1110.9	1120.4	1133.6	1134.8
15°	1326.7	1294.5	1230.1	1165.7	1127.6	1108.5	1105.0	1110.9	1125.2	1145.5	1147.9
17.5°	1337.4	1299.2	1219.4	1146.7	1107.3	1095.4	1101.4	1115.7	1135.9	1163.4	1165.7
20°	1344.5	1299.2	1203.9	1124.0	1087.1	1084.7	1101.4	1124.0	1145.5	1177.7	1181.2
22.5°	1351.7	1296.9	1186.0	1096.6	1064.4	1071.6	1102.6	1131.2	1152.6	1187.2	1193.2
25°	1364.8	1300.4	1168.1	1069.2	1040.6	1060.9	1101.4	1135.9	1158.6	1194.4	1203.9
27.5°	1382.7	1308.8	1155.0	1044.2	1016.7	1044.2	1093.0	1134.8	1158.6	1193.2	1203.9
30°	1401.8	1318.3	1139.5	1016.7	989.3	1020.3	1075.2	1121.6	1149.1	1181.2	1194.4
32.5°	1422.0	1329.0	1126.4	986.9	956.0	988.1	1048.9	1101.4	1131.2	1161.0	1175.3
35°	1449.4	1348.1	1119.3	963.1	926.2	954.8	1015.6	1075.2	1107.3	1134.8	1151.4
37.5°	1482.8	1372.0	1115.7	939.3	894.0	917.8	979.8	1043.0	1077.5	1100.2	1115.7
40°	1520.9	1401.8	1114.5	916.6	861.8	879.7	942.8	1006.0	1039.4	1057.3	1070.4
42.5°	1563.9	1435.1	1112.1	894.0	829.6	843.9	907.1	969.1	997.7	1013.2	1025.1
45°	1609.2	1468.5	1107.3	866.6	795.0	811.7	870.1	925.0	954.8	967.9	981.0
47.5°	1654.5	1501.9	1097.8	835.6	764.1	779.5	830.8	878.5	902.3	914.2	927.4
50°	1698.6	1531.7	1075.2	799.8	731.9	746.2	785.5	817.7	835.6	845.1	858.2
52.5°	1737.9	1551.9	1043.0	758.1	699.7	706.8	733.1	760.5	774.8	776.0	787.9
55°	1771.3	1562.7	996.5	715.2	665.1	666.3	680.6	702.1	708.0	703.3	711.6
57.5°	1790.3	1556.7	945.2	671.1	629.4	624.6	635.3	646.0	647.2	635.3	643.7
60°	1795.1	1529.3	878.5	627.0	593.6	580.5	584.1	581.7	579.3	574.5	581.7
62.5°	1771.3	1470.9	804.6	584.1	555.5	535.2	534.0	532.8	536.4	537.6	538.8
65°	1684.2	1361.2	716.4	540.0	514.9	487.5	486.3	500.6	505.4	498.2	500.6
67.5°	1516.2	1193.2	619.8	488.7	463.7	439.8	449.4	457.7	466.1	463.7	466.1
70°	1277.8	979.8	531.6	431.5	407.7	394.5	405.3	412.4	413.6	411.2	413.6
72.5°	1004.8	765.2	449.4	373.1	351.6	345.7	358.8	364.7	375.5	380.2	381.4
75°	725.9	565.0	368.3	309.9	292.0	292.0	304.0	314.7	324.2	318.3	314.7
77.5°	405.3	337.3	264.6	213.4	216.9	233.6	238.4	250.3	259.8	258.7	256.3
80°	245.5	211.0	178.8	138.3	137.1	150.2	181.2	201.4	206.2	195.5	194.3
82.5°	127.5	110.9	95.4	77.5	85.8	100.1	104.9	126.3	139.5	134.7	140.7
85°	32.2	31.0	34.6	35.8	44.1	48.9	53.6	63.2	41.7	20.3	20.3
87.5°	9.5	9.5	11.9	11.9	15.5	19.1	17.9	17.9	9.5	1.2	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)